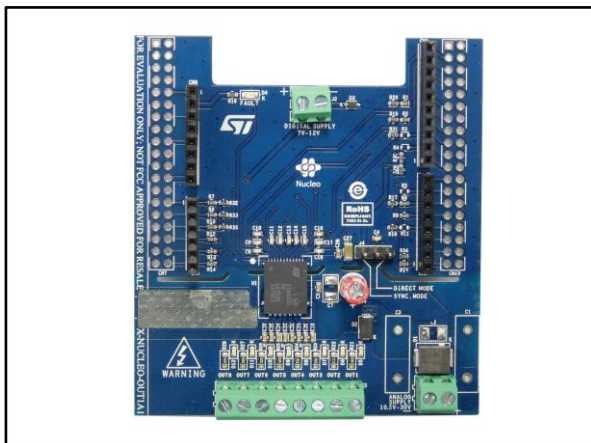


Industrial Digital output expansion board based on ISO8200BQ for STM32 Nucleo

Data brief



Features

- Enables industrial programmable logic controller (PLC) capabilities on STM32 Nucleo
- ISO8200BQ galvanic isolated octal high-side smart power solid state-relay
- Operating voltage from 10.5 V to 33 V
- Maximum operating output current per channel $I_{OUT} = 700$ mA
- Status LEDs: Fault, Thermal protection
- Compatible with Arduino® UNO R3 connector
- Compliance with EMC standards:
 - IEC61000-4-2: 8kV Contact Discharge and 15kV Air discharge
 - IEC61000-4-3: 4kV Discharge on output and supply line
 - IEC61000-4-5: 2kV Discharge on output and supply line
- Compatible with STM32 Nucleo boards
- RoHS compliant

Description

The X-NUCLEO-OUT01A1 is an Industrial Digital output expansion board based on ISO8200BQ for STM32 Nucleo boards.

It provides an affordable and easy-to-use solution involving galvanic insulation embedded in industrial power switch driver applications.

The Arduino™ UNO R3 connector compatibility allows to connect the following STM32 Nucleo development boards: NUCLEO-F103RB, NUCLEO-F302R8 and NUCLEO-F401RE.

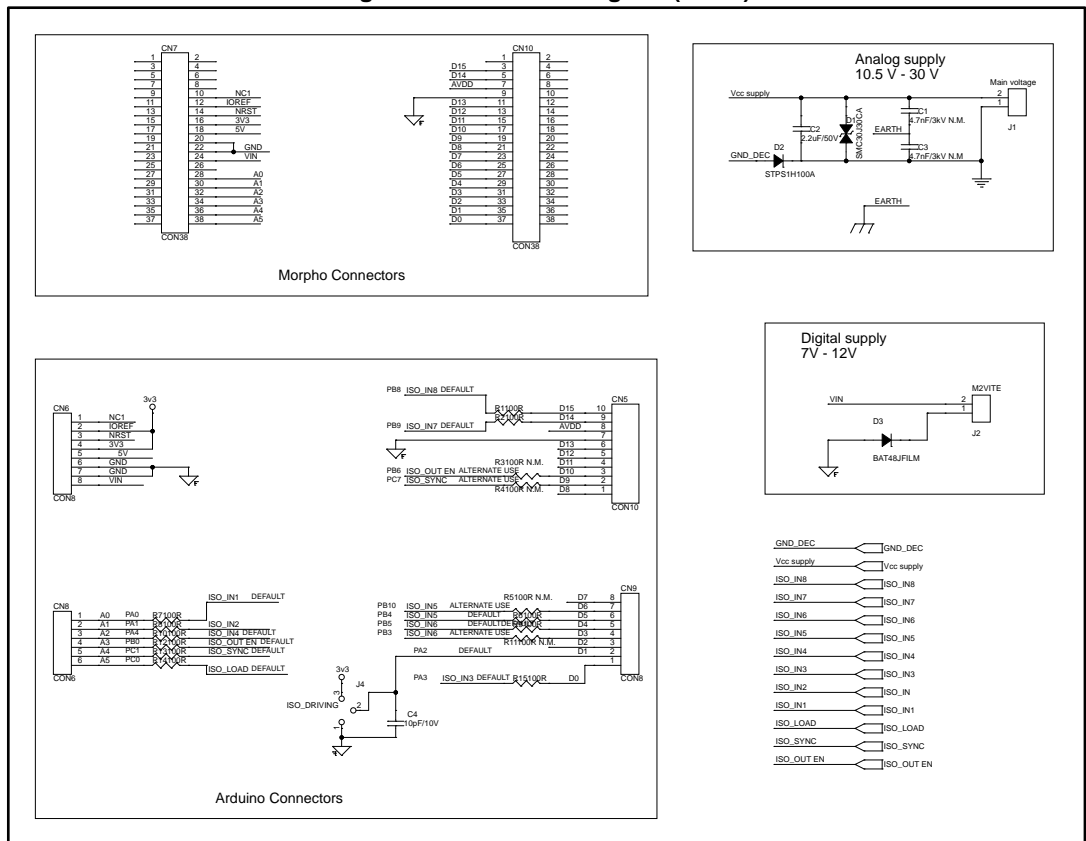
The X-NUCLEO-OUT01A1 can be connected to the X-NUCLEO-PLC01A1 to form a powerful industrial PLC with 8 inputs and 16 outputs.

Wireless communication capabilities can be added with the X-NUCLEO-IDW01M1, which establishes communication on a smart device to manage the PLC remotely. A dedicated ST-PLC app is available for Android™ and iOS™ systems for this purpose.

This evaluation board is designed to meet industrial standard requirements.



Figure 2: Schematic diagram (2 of 2)



Revision history

Table 1: Document revision history

Date	Version	Changes
24-May-2017	1	Initial release.

IMPORTANT NOTICE – PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2017 STMicroelectronics – All rights reserved

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Power Management IC Development Tools](#) category:

Click to view products by [STMicroelectronics](#) manufacturer:

Other Similar products are found below :

[EVAL-ADM1168LQEBZ](#) [EVB-EP5348UI](#) [MIC23451-AAAYFL EV](#) [MIC5281YMME EV](#) [DA9063-EVAL](#) [ADP122-3.3-EVALZ](#) [ADP130-0.8-EVALZ](#) [ADP130-1.2-EVALZ](#) [ADP130-1.5-EVALZ](#) [ADP130-1.8-EVALZ](#) [ADP1712-3.3-EVALZ](#) [ADP1714-3.3-EVALZ](#) [ADP1715-3.3-EVALZ](#) [ADP1716-2.5-EVALZ](#) [ADP1740-1.5-EVALZ](#) [ADP1752-1.5-EVALZ](#) [ADP1828LC-EVALZ](#) [ADP1870-0.3-EVALZ](#) [ADP1871-0.6-EVALZ](#) [ADP1873-0.6-EVALZ](#) [ADP1874-0.3-EVALZ](#) [ADP1882-1.0-EVALZ](#) [ADP199CB-EVALZ](#) [ADP2102-1.25-EVALZ](#) [ADP2102-1.875EVALZ](#) [ADP2102-1.8-EVALZ](#) [ADP2102-2-EVALZ](#) [ADP2102-3-EVALZ](#) [ADP2102-4-EVALZ](#) [ADP2106-1.8-EVALZ](#) [ADP2147CB-110EVALZ](#) [AS3606-DB](#) [BQ24010EVM](#) [BQ24075TEVM](#) [BQ24155EVM](#) [BQ24157EVM-697](#) [BQ24160EVM-742](#) [BQ24296MEVM-655](#) [BQ25010EVM](#) [BQ3055EVM](#) [NCV891330PD50GEVB](#) [ISLUSBI2CKIT1Z](#) [LM2744EVAL](#) [LM2854EVAL](#) [LM3658SD-AEV/NOPB](#) [LM3658SDEV/NOPB](#) [LM3691TL-1.8EV/NOPB](#) [LM4510SDEV/NOPB](#) [LM5033SD-EVAL](#) [LP38512TS-1.8EV](#)